

Abstract

Techniques for use in designing, adjusting or operating a wireless network so as to provide a desired level of performance for the network. An optimization process is applied to a set of information characterizing the network. The optimization process is implemented as a multi-stage process which includes at least a frequency assignment stage and a post-frequency-assignment optimization stage, wherein the frequency assignment stage and the post-frequency-assignment stage are subject to iteration. For example, after an initial assignment of the frequencies in the frequency assignment stage, the post-frequency-assignment optimization stage may be performed, and based on the result of the optimization, at least one of the frequency assignment stage and the post-frequency-assignment optimization stage may be repeated. An output of the optimization process is utilized to determine one or more operating parameters of the wireless network, such as a base station transmit power or antenna orientation. The optimization process in an illustrative embodiment may be implemented as a three-stage process which includes a pre-frequency-assignment optimization stage, the frequency assignment stage and the post-frequency-assignment optimization stage, with one or more subsets of these stages being implemented in an iterative manner.